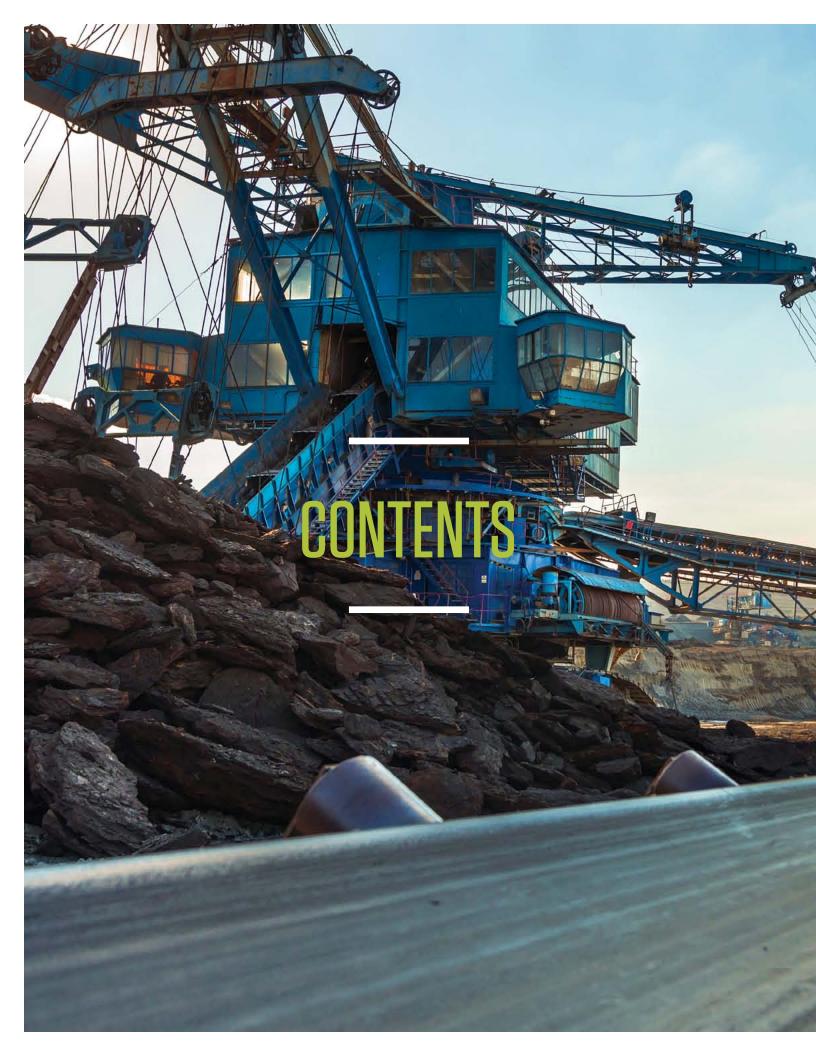
# **GETTING IT RIGHT**

A Just Transition Strategy for Alberta's Coal Workers





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# INTRODUCTION

The Government of Alberta and the Government of Canada have decided to phase out emissions from coal-fired electricity generation by 2030. Phasing out emissions from coal-fired electricity is an ambitious task for Alberta. Currently 55 per cent of Alberta's electricity comes from 18 coal-fired generators located in six plants—the highest proportion of electricity generation by coal in all of Canada. Six of those generators, in three plants, have lifespans that exceeded the 2030 phase-out date, indicating a prior perception that coal was going to be a continued source of electricity generation for the long term based solely on economic and reliability constraints.

To accomplish the phase out of coal-fired electricity emissions, the Government of Alberta has taken a number of steps in terms of electricity market design and deals with utility providers. On the advice of the coal facilitator Terry Boston, they have agreed to provide utility companies more than a billion dollars to offset their stranded assets. To replace the significant amount of coal-fired electricity capacity that will be off the grid, they have incentivized producers towards a 30 per cent renewable capacity target. Perhaps most ambitiously, they have announced market reforms that will move Alberta towards a capacity market for electricity generation, which they hope will encourage investment into new capacity to replace lost coal-fired electricity capacity. They have also announced caps on electricity rates for consumers, to ensure that they do not face ballooning or uncontrolled price hikes. All of which will be paid for by levy on industrial emissions.

#### What about workers?

While these are all sensible and expected moves on the part of the government in making a transition away from coal-fired electricity, one crucial aspect of the transition remains: what happens to the workers and communities that have sustained themselves through the coal-fired electricity sector? Do they not deserve the same attention that was given to affected companies and consumers in making this transition? The Government of Alberta has stated that "Workers, communities and affected companies will be supported and treated fairly during the transition from coal-fired electricity generation" along with the appointment of the Advisory Panel on Coal Communities.<sup>1</sup> While this is a strong commitment, workers need to be directly and actively involved in transitional planning as soon as possible.

## The burden of climate change policies can't fall on workers alone

The phase out of coal-fired electricity generation is being justified as a necessary decision to address the serious societal issue of climate change. When addressing a societal issue that will impose costs, it is unfair to download those costs on a single segment of society or individuals, in this case, workers within the coal-fired electricity sector. After all, these workers are not responsible for the emissions and air quality problems associated with their workplaces. For their part, these workers are working to sustain their livelihoods and families. There are more than 3,000 workers in Alberta's six affected coal-fired generation plants and their associated coal mines. In respect to the work they have done and continue to do, they deserve a transitional strategy to ensure they have a place within a lowercarbon economy.

#### Support for climate change policies hinges upon the success of transition for workers

Governments of all stripes, and of all levels, should take note that transitional planning for workers is not just about fairness, but about the political viability of climate change policies. In the coming years, many more policies to address climate change will be needed, many of which will prompt significant shocks within the economy and labour market. If governments and industries ignore the needs of workers in designing and implementing these policies, they will undermine the social license needed to implement them. The public perception of policies aimed at addressing climate change has often revolved around the conception that meaningful climate change policies will negatively impact economic outcomes for ordinary citizens. Both the Provincial and Federal governments are presented with an opportunity to prove that they can enact meaningful policy to address climate change and deliver positive outcomes for impacted workers. If the Government of Alberta and the Government of Canada are serious about showing climate leadership, it then behooves them to show leadership in providing transitional assistance to workers. Workers across all industries and sectors will be watching this process intently. Government needs to prove to them that they can get this right.

#### Just transitions as a framework for action

The good news is that this is possible, and a framework for action exists. This framework is called "just transition"; a concept that has been endorsed by the International Labour Organization, the United Nations, the Canadian Labour Congress, and countless other organizations around the world.<sup>2</sup> The principle of just transition assumes that the burden of emissions reduction should be shared equally across society, not targeting workers unfairly in specific areas of the labour market. In practice, this principle would bring workers and government together to identify opportunities for skills development, decent work, sustainable development, and social protections. Strategies tailored towards the needs of the workforce can then be implemented, which might include income and benefit support, retraining, pension bridging, early retirement assistance, or relocation assistance.

<sup>1</sup>"Alberta Government. Phasing out Coal Pollution." http://www.alberta.ca/ climate-coal-electricity.aspx#toc-4

<sup>2</sup> International Labour Organization. "Resolution concerning sustainable development, decent work and green jobs."http://www.ilo.org/wcmsp5/ groups/public/@ed\_norm/@relconf/ documents/meetingdocument/ wcms\_223785.pdf The principle of just transition was also recommended by the Alberta Government's Climate Change Advisory Panel report to the Minister of the Environment.<sup>3</sup> The authors of the report recognized that many of their recommendations would "drive workforce change that will be less positive for some workers and communities" including "employment reduction caused by the phase out of coal-fired electricity." In response to these challenges, the report recommended just transition strategies specifically tailored to the circumstances of impacted workers. It also recommended that these strategies be developed and implemented with the active involvement of affected workers. In this manner, effective policy to address skills development and training, pension bridging, and income support are all possible.

## Government must take a leadership role in ensuring just transition

A successful just transition strategy will not materialize on its own. Just transition requires strong leadership and resources from government to be successful. Industry has little motivation to take a leadership role, as their role is guided by their bottom line. Workers have the motivation, but lack the resources and authority. Only government has the responsibility and resources to make this transition happen in a manner that is in the public's best interest. In the case of the phase out of coal-fired electricity, both the Federal and Provincial government must be willing to provide leadership and resources to this transitional strategy for workers. Taking meaningful action on just transition is new ground for governments. This is an opportunity for the Government of Alberta to model real leadership, to complement their leadership on addressing climate change.

This report will explore what just transition means in the context of the phase out of coal-fired electricity emissions. First, we outline the changes to the Alberta electricity generation sector, and how those changes are driving the need for a just transition for workers. Second, we identify and discuss case studies that could usefully inform Alberta's phase-out of coal-fired electricity. Understanding these case studies gives us a foundation for the next section, where we identify best practices and lessons that Alberta's just transition strategy should emulate. Next, the report will cost out the job losses associated with the phase out of coal-fired electricity generation. Lastly, we lay out our recommendation for an agency to oversee and implement the transition.

United Nations. Just Transition of the workforce, and the creation of decent work and quality jobs.

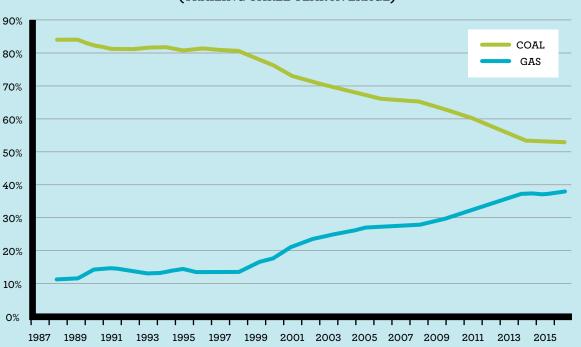
<sup>3</sup> Climate Change Advisory Panel. "Climate Leadership: Report to Minister"http://www.alberta.ca/ documents/climate/climate-leadershipreport-to-minister.pdf

## CHANGES TO BEREAS ELECTRICITY SENERATION SECTOR

Coal-fired electricity generation is in decline in Alberta and elsewhere. There are a number of causes for this decline, and it is important to understand them in order to be able to determine the costs of transition program options.

While coal-fired power generation remains the majority of power generation in Alberta, it has been steadily losing its once dominant share to natural gas, this trend has been evident for several years (see Figure 1). In the United States, the share of gas-fired generation overtook coal in April of 2015.

#### Figure 1—Gas overtaking coal<sup>4</sup>



ALBERTA ELECTRICITY GENERATION PER CENTAGE (TRAILING THREE YEAR AVERAGE)

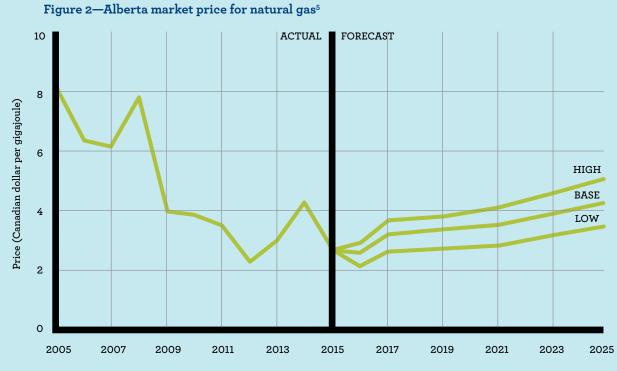
Figure 1–Since 1997, the proportion of coal-fired electricity generation in Alberta has been declining in favour of natural gas-fired electricity generation

Natural gas-fired electricity generation is becoming more attractive relative to coal-fired electricity due to long-term price and market forces. Gas prices have dropped precipitously as increasingly large supplies of natural gas have been brought about by fracking and shale gas production. In purely economic terms, coal is losing its competitive advantage.

<sup>4</sup> Source of data: Alberta Utilities

Commission "Annual electricity data collection" www.auc.ab.ca/market-

oversight/Annual-Electricity-Data-Collection/Pages/default.aspx.



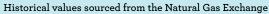
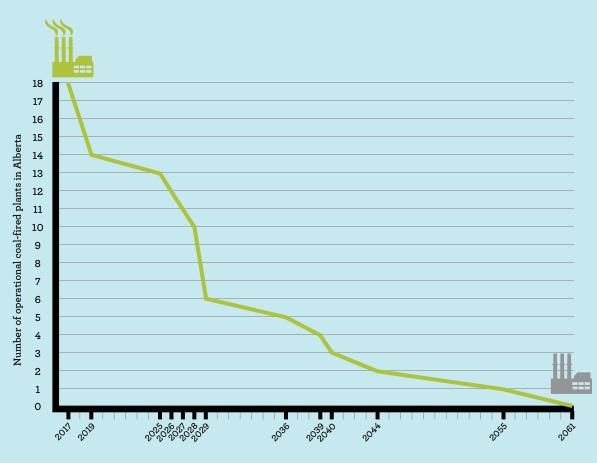


Figure 2–Natural gas prices in Alberta forecasted to remain low

<sup>5</sup> Alberta Energy Regulator. "Natural Gas Prices" https://www.aer.ca/dataand-publications/statistical-reports/ natural-gas-prices.

In addition to market forces, government at the provincial and federal level and across the political spectrum, has played a role by introducing policy aimed at reducing health-impairing smog and carbon emissions, including those from coal combustion. In 2007, the Alberta Progressive Conservative Government enacted smog regulations, dubbed the Specified Gas Emitters Regulation, and industrial carbon pricing that affected coal's competitiveness relative to cleaner-burning natural gas. The Federal Conservative Government in 2012 passed coal phase-out regulations requiring coal generator units to shut down by age 50, and preventing new ones from opening. With the 2012 federal regulations on coal-fired generation, it is likely that natural gas would have supplanted coal in the immediate future regardless of the 2030 pollution controls enacted by the current provincial government. Between these provincial and federal initiatives, 12 of Alberta's 18 coal-fired generation units will shut down by 2029. Neither the Federal Conservatives nor the Provincial Progressive Conservatives created any transition support programs for workers affected by these policies.



#### Closure of Alberta coal-fired generating units under federal regulations

"Most of our Alberta conventional coal plants will either close or be retrofitted with carbon capture technology between 2019 and 2029 because of the federal greenhouse gas (GHG) regulations enacted in 2012."

- Dawn Ferrell, President and CEO of TransAlta<sup>6</sup>

Since then, the Provincial NDP government increased the existing carbon price and required the remaining six coal-fired generators to be pollution-free by 2030 (see Figure 2). The Federal Liberal government will require coal units across Canada to meet an emissions standard of 420 t/GWh, or shut down by 2030.<sup>7</sup> Unlike their respective conservative predecessors, the Provincial NDP and the Federal Liberal governments have committed transition support to assisting affected workers.

<sup>6</sup> Dawn Ferrell, President and CEO of TransAlta, May 18, 2014. www.transalta. com/sustainability/ceo-message-2013.

<sup>7</sup> Environment and Climate Change Canada, "Government notices Department of the environment Canadian Environmental Protection Act, 1999 (CEPA) Notice of intent to develop greenhouse gas (GHG) regulations for electricity generation in Canada" www.ec.gc.ca/lcpe-cepa/default. asp?lang=En&n=270D0B55-1.

#### Figure 3—Alberta's action to zero emissions $^{\rm s}$

		Federal regulation of coal-fired emissions		Alberta's action to phase-out coal-fired emissions		
COAL-FIRED GENERATION			d units meet performance 's at end-of-life approx. or shut down.	Zero pollution from coal-fired generation by 2030.		
UNIT AND OWNER	MINE AND OWNER 20	016	2	030		2061
Keephills 3 Capital Power and TransAlta	Highvale TransAlta					2061
Genesee 3 Capital Power and TransAlta	Genesee Westmoreland Coal Company				2055	
Genesee 1 Capital Power	Genesee Westmoreland Coal Company			2044		
Sheerness 2 ATCO Power and TransAlta	Sheerness Westmoreland Coal Company			2040	Focus of Alberta's	
Genesee 2 Capital Power	Genesee Westmoreland Coal Company			2039	action to zero emissions	
Sheerness 1 ATCO Power and TransAlta	Sheerness Westmoreland Coal Company			2036		
Keephills 2 TransAlta	Highvale TransAlta		2029			
Keephills 1 TransAlta	Highvale TransAlta		2029			
Battle River 5 ATCO Power	Paintearth and Vesta Westmoreland Coal Company		2029			
Sundance 6 TransAlta	Highvale TransAlta		2029		LEGEND Expected Closure Date	
Sundance 5 TransAlta	Highvale TransAlta		2028		20XX	
Sundance 4 TransAlta	Highvale TransAlta		2027		20XX	
Sundance 3 TransAlta	Highvale TransAlta		2026		_	
Battle River 4 ATCO Power	Paintearth and Vesta Westmoreland Coal Company		2025			
Sundance 2 TransAlta	Highvale TransAlta	2019				
HR Millner Maxim Power	Coal Valley Westmoreland Coal Company	2019		Not affected by	es not used for electricity generation in A phase-out of coal-fired emissions e (Westmoreland) – Hinton	lberta:
Sundance 1 TransAlta	Highvale TransAlta	2019		Cardinal River M	ie (Westmoreland) – Hinton Mine/ Cheviot (Teck Coal) – Hinton pal Mine (Grande Cache Coal) – Grande C	Cache
Battle River 3 ATCO Power	Paintearth and Vesta Westmoreland Coal Company	2019			e required to meet air quality regulations a	

#### COAL UNITS, OWNERS AND ASSOCIATED MINES IN ALBERTA

<sup>8</sup> Government of Alberta http://www. alberta.ca/climate-coal-electricity.aspx

# millin BEST PRACTICES

There are many examples of planned transitions, across many industries and jurisdictions. These examples provide useful ideas for Alberta's coal transition. This section outlines a few case studies, and provides key lessons learned.

## **CASE STUDIES**

#### Centralia, Washington: closure of coal plant

The Centralia Coal Plant in Washington State was brought online in 1971, with its two coal-fired boilers producing 1,340 megawatts of electricity. TransAlta acquired the plant in 2000 and started gas-fired generation in 2002. In 2010, the natural gas-fired units were largely idle following 2010 and completely removed in 2014.<sup>9</sup> Because of an agreement reached in 2011, one coal-fired boiler will go offline in 2020 followed by the second in 2025.<sup>10</sup>

As one of the major employers for a region that has experienced significant economic turmoil and as one of the only employers offering good wages, the loss of these two coal-fired generating units could have a dramatic impact on the surrounding community. The plant employs 300 workers, 158 of them unionized, and 400 contractors. According to TransAlta, the average annual wages were \$88,000 "in a community with more that 13 per cent unemployment and where average annual family wages are less than \$34,000."<sup>11</sup> Moreover, at the time of decision to retire the Centralia plant, it was providing 10 per cent of the electricity produced in Washington.

Fortunately, the process by which the decision to shut down the two coal-fired boilers was made was highly mindful of the community and the workers that would be impacted. The Sierra Club, the environmental group that led the effort to retire the plant, stated clearly that they were only successful once they were able to bring the plant's workers into the conversation. Prior efforts to shut down the plant by 2015 had drawn the ire of union leaders from IBEW, who could not support the closure of the plant without a transition plan. Environmentalists agreed to this provision and began lobbying the Washington State Governor to provide positive outcomes for the livelihoods of plant workers and the City of Centralia. Several concessions were made to ask for a delayed shut down of the plant, to provide time for workers to reach retirement and for the community to adjust.<sup>12</sup>

The 2011 deal to close Centralia Coal Plant was one of significant compromise between a number of typically competing interests. The agreement is now enshrined in law, as Senate Bill 5769. Of great significance, the bill stated:

"The legislature finds that coal-fired baseload electric generation facilities are a significant contributor to family-wage jobs and economic health in parts of the state and that transition of these facilities must

<sup>9</sup> "TransAlta had reduced dispatch in 2015 for Centralia coal plant in Washington." https://www.hubs.com/ power/explore/2016/02/transalta-hadreduced-dispatch-in-2015-for-centraliacoal-plant-in-washington

<sup>10</sup> TransAlta. "Centralia." http://www. transalta.com/facilities/plantsoperation/centralia

<sup>11</sup> TransAlta. "TransAlta Centralia: Frequently Asked Questions." http:// www.transalta.com/sites/default/files/ Centralia%20FAQ.pdf

<sup>12</sup> Scott Martelle. "Kick Coal, Save Jobs Right Now: In Wahington State, a blue-green alliance helps phase out dirty energy." Sierra Club. http://vault. sierraclub.org/sierra/201201/kick-coalsave-jobs.aspx address the economic future and the preservation of jobs in affected communities." The bill also commits "to provide assistance to host communities planning for new economic development and mitigating the economic impacts of the closure of these facilities."<sup>13</sup>

The agreement on the 2020 and 2025 timeline is significant for the workers of the plant, and represented a major win. 40 per cent of the plant's workforce would reach retirement before the closure, giving these workers the assurance that they would have vital job security in the twilight of their careers. For the other 60 per cent of the workforce that would not reach retirement, they now had at least eight years or at maximum 12 years, to prepare for the future. However, the transition plan does not make special measures for individual workers nor specifically prepare them for the time when the plant closes.

Instead, transitional programs and support are being directed towards community investment. TransAlta is contributing \$55 million toward three funds managed by boards, addressing everything from worker training to weatherproofing to green energy projects. Each board is comprised of reps from TransAlta, state environmental groups and community leaders, including one from the local labor council. A brief description of the three boards follows.

- "Weatherization Board (\$10 million): The Weatherization Fund supports projects in Lewis County and South Thurston County, Washington with businesses, nonprofit organizations and local governments to improve and promote energy efficiency, conservation and weather proofing for example, through the installation of improved insulation, better windows, weather stripping, more efficient water heaters, appliances and lighting systems. Other projects that may qualify could include more efficient lighting and ventilation or installation of solar panels.
- Economic and Community Development Board (\$20 million): The Economic and Community Development Fund supports projects to educate and retrain workers in Lewis and South Thurston counties, with a special emphasis on the needs of community members affected by the eventual closure of the coal-fired electric generating facility in Centralia, Washington. It also provides grants for projects that enhance economic opportunities and community partnerships that benefit and strengthen the region.
- Energy Technology Board (\$25 million): The Energy Technology Fund supports projects in Washington State that benefit clean energy, air quality or the environment. Eligible projects could include green energy technologies, alternative fuels and other products or processes that increase conservation or minimize pollution."<sup>14</sup>

The first of these grants are now being approved and delivered to recipients. As of this moment only two grants have been approved. The first will support weatherization in Lewis County, the second will fund the restoration of an historic theatre.<sup>15</sup>

#### "[W]e recognize the need for our employees, community and state to receive funding benefits as a result of the 2011 coal transition plan."

- TransAlta, 2015<sup>16</sup>

<sup>13</sup> State of Washington. "Engrossed Second Substitute Senate Bill 5769." http://lawfilesext.leg.wa.gov/ biennium/2011-12/Pdf/Bills/ Senate%20Passed%20Legislature/ 5769-S2.PL.pdf#page=1

<sup>14</sup> TransAlta, "Investing in the local community and Washington State" www.transalta.com/newsroom/featurearticles/2015-07-31/transalta-invests-55-million-washington-state.

<sup>15</sup> Centralia Coal Transition Grants. http://cctgrants.com/category/grantrecipients/

<sup>16</sup> TransAlta. \*\$55 million community development, energy efficiency investment moving ahead." http:// www.transalta.com/newsroom/newsreleases/2015-07-30/55-millioncommunity-development-energyefficiency-investment-movi In 2015, a bill in the Washington Senate attempted to give tax breaks to TransAlta to encourage the conversion of Centralia coal-fired units to either natural gas or biomass, but it was ultimately not passed. The stated purpose of the bill's sponsors was to ensure no jobs were lost by the complete shut-down of the coal-fired units at Centralia Coal Plant.<sup>17</sup> At this time, TransAlta has not yet announced whether a new gas-fired facility or new gas-fired units are under consideration. It is widely noted that Washington's electrical grid is largely hydro based, and has access to power generation from other states. As such, there may not be a financial or business decision to convert the facility or construct a new natural-gas fired plant.

#### Blount Street Madison, Wisconsin: coal transition to natural gas

Originally commissioned in 1902, the Blount Street Power Plant, or the Blount Generating Station (BGS) was originally a coal-fired power generation facility located in downtown Madison, Wisconsin. In 2006, its owner, Madison Gas and Electric (MGE), announced that it would phase out coal and convert it to natural gas in six years, stating that the change would result in about 70 layoffs.

As of December 31, 2011 the BGS has completed the transition to natural gas. Ultimately, through two negotiations spanning two collective agreements with the plant's union, IBEW 2304, only four unionized workers were laid off. However, these workers were covered by the agreement as well, with job placement and supports to assist them. The union also took an active role in negotiating opportunities for these four workers to find employment in plants co-owned by MGE.<sup>18</sup>

MGE's Energy 2015 Plan was negotiated by the union and the company in 2009. The plan committed MGE to "make good faith and reasonable efforts to avoid layoffs." To this end the agreement provided the following provisions to provide job security for workers at Blount Generating Station as attachment D in the 2009 collective bargaining agreement between MGE and IBEW 2304.<sup>19</sup>

- Job guarantees: 25 workers who were employed prior to May 2009 were, on the basis of seniority, to be guaranteed employment at the plant within four classifications (control operators, auxiliary operators, maintenance mechanics and apprenticeship & industrial electrician and instrument technician and apprenticeship)
- Company-sponsored training: To ensure current BGS employees were sufficiently trained for the transition to natural gas, company-sponsored training was made available by October 31, 2009 (well in advance of the final transition to natural gas)
- **Tuition reimbursement**: Employees can have up to 100 per cent of their training cost covered by company reimbursement to be qualified for jobs within BGS or similar jobs in other companies.
- **Preferential hiring**: The company agreed to restricting bidding on vacant entry-level positions to current BGS employees where possible. In cases where vacancies accepted outside applications, the current BGS employees would be given preference over external applicants.
- Wage protection outside of BGS: For workers offered positions with MGE, but outside of BGS, they were guaranteed that they would receive their existing rate of pay at the new position.

Despite these efforts, both MGE and IBEW recognized that some lay-offs might ultimately be necessary. The plan covered the following provisions for workers that would be laid off.

<sup>17</sup> State of Washington. "Senate Bill 5575." http://lawfilesext.leg.wa.gov/ biennium/2015-16/Pdf/Bills/ Senate%20Bills/5575.pdf#page=1

<sup>18</sup> IBEW Local Union 2304"BGS and the Energy 2015 Plan," IBEW Local Union 2304 Newsletter, Fall 2011.

<sup>19</sup> "2009 Madison Gas and Electric Company IBEW Local No. 2304 Contract Settlement Summary." http://ibew2304.com/userfiles/file/ Settlement%201/2009%20IBEW%20 Settlement%20Summary1.pdf

- **Outplacement services**: \$3,000 per worker in outplacement services (assistance designed to help workers find new jobs and a new place within the job market)
- Severance pay: Severance will be equal to two weeks pay, plus one week of pay for every year of service. Minimum of 10 weeks and maximum of 26 weeks. Further, any laid off employee that is later re-hired by BGS will retain prior seniority.
- **Retirement severance option**: Employees 55 or older have the option of gaining severance instead of continued employment, while also gaining eligibility for retirement benefits under their contract.
- Job preference: Laid off workers from BGS will have first consideration in filling positions at other MGE facilities.

The plan also set out a plan for bridging employees that were over 60 years of age to reach early retirement. Eligible employees will receive regular severance plus a monthly social security supplement of \$1,500 until the employee reaches the age of 62.

The lengthy transition period was identified as an important factor in the success of the transition, and instead of 70 layoffs, in the end there were four layoffs. The union was working toward having them reassigned to other jobs in the plant or elsewhere in the company.<sup>20</sup> Ultimately, BGS' transition from coal-fired to natural gas-fired was done with a minimum of disruption to the workforce and to the community.

"Union president Dave Poklinkoski ... noted the value of the extended timeline for the phaseout. 'It's not a sixty-day or a ninety-day notice, it's a six-year notice. So we think both parties can put our heads together and figure out a humane way to address this."<sup>21</sup>

#### Ruhr Valley transition away from steel/coal

The coal-rich Ruhr Valley in Germany has been of great economic significance to Germany and to Europe since the mid-19th century. Coal powered the region's century-long industrial boom and turned the area into an internationally recognized economic powerhouse. The power and reputation of its industry has also influenced the identity of the region's inhabitants, who were overwhelmingly employed in coal mining or steel production. 500,000 workers were employed in Ruhr coal mines in 1956, 220,000 were employed in the region's steel mills in 1958. Together, the industry employed nearly 70 per cent of the Ruhr labour force in the 1950s. While transition is still currently ongoing, the Ruhr region has undergone a massive transformation over the past six decades. The region now boasts a vibrant technological and services economy, instead of a coal/steel economy.<sup>22</sup>

Beginning with the global economic crisis of 1973, the German coal and steel industry had been in a steady decline due to market forces.<sup>23</sup> German steel production began to lose its competitiveness as the easiest to mine coal became depleted, forcing German coal miners to go deeper and farther to extract coal—at greater cost. By the mid-1980s most large steel companies within the Ruhr were in dire financial straits, which prompted them to shutter plants and mines putting the entire region in crisis. In 1987, the unemployment rate of the Ruhr region reached 15.1 per cent. Given the oversized role of coal and steel production in the Ruhr, this decline was marked by social upheaval and turmoil.<sup>24</sup>

<sup>20</sup> J. Brecher, "Jobs Beyond Coal: A Manual for Communities, Workers, and Environmentalists" 2012. Labor Network for Sustainability. http:// report.labor4sustainability.org/.

<sup>21</sup> Madison.com. "Blount St. Plant to Stop Burning Coal." http://host. madison.com/news/article\_25abc19a-75ab-5f1f-9303-2acfdee627e6.html

<sup>22</sup> Robert P. Taylor. "A Review of Industrial Restructuring in the Ruhr Valley and Relevant Points for China." Institute for Industrial Productivity. July 2015. http://www.iipnetwork.org/ Industrial%20Restructuring%20in%20 the%20Ruhr%20Valley.pdf

<sup>23</sup> Bela Galgoczi. "The long and winding road from black to green: Decades of structural change in the Ruhr region." http://www.loo.rg/ wcmsp5/groups/public/---ed\_ dialogue/---actrav/documents/ publication/wcms\_375232.pdf

<sup>24</sup> Gert-Jan Hospers. "Restructuring Europe's rustbelt: The case of the German Ruhrgebiet." https://www. econstor.eu/bitstream/10419/41768/ 1/38895079X.pdf The lack of economic diversification within the Ruhr Valley was regarded as the key problem. As the industry declined, there was nothing to absorb the now out-of-work coal and steel workers. However, in 1988 a number of companies and municipalities began working together to fund projects designed to diversify the Ruhr's economy. This was the Emscher Park Initiative, which soon gained the support and funding of the German Government. The Initiative began funding and supporting economic transformation and development. Key to this success was the effort on the part of local actors to choose new industries that related to the old industries experience.<sup>25</sup> Another remarkable development in this time was the harnessing of the region's industrial heritage as both a means to celebrate the past and provide opportunities for the future. Zollverein industrial complex, once a thriving coal mining site, is now a thriving UNESCO heritage site which draws in tourists and arts events from across Europe. Such projects were necessary for the region to reconcile its rich industrial past with its rapidly evolving future. By 2007, a small coal mining and steel production industry has managed to endure in the Ruhr Valley alongside a growing services economy and renewable energy sector.

In 2007, the German government, state governments, RAG Corporation and the Mining, Chemical and Energy Industrial Union agreed to discontinue government subsidies for coal and work toward ending the coal mining industry by 2018. In 2008, 20,368 persons were employed in the seven mines still in operation, by January 2014, two mines were still in operation, with a total of 11,448 persons employed.<sup>26</sup> This decision will complete the decades-long transition of the Ruhr Valley from coal and steel.

The year 2018 was chosen in large part due to the fact that most workers in the sector would reach retirement age, limiting the impact of the closures on affected workers. "Early retirement has been and will be an important instrument for the socially responsible downsizing process. The legal framework for this is based on the transition payments system (APG) for coal industry employees introduced by state legislation in 1972. These payments take the form of financial bridging support, paid monthly, that is made available for a maximum period of five years to workers after early termination of employment and until they first qualify for the pension insurance scheme. All employees who lose their jobs before 31 December 2022 are entitled to receive such benefits as soon as they reach the specified age threshold and period of service."<sup>27</sup>

However, it is estimated that at least 1,200 workers will not be able to retire or leave the industry by 2018. The process is complicated by the fact that the mines must continue to function until they are closed down, limiting what can be accomplished through attrition and early retirement. An agreement was negotiated between the German Coal Association and the trade Union for Mining, Chemical and Energy Industries to meet the needs of the industry to keep the mines operating safely and for workers to maintain their jobs. The agreement offered exceptional job security to all coal miners within the Ruhr, with a guarantee that a worker will have a job at their current facility or a subsidiaries facility until the 2018. The agreement has also established Personnel Development Centers within the facilities, which will provide training for jobs outside of the coal mining industry.<sup>28</sup>

The long German transition from coal and steel production is not yet complete, but is generally regarded as a success. Strong worker protections for coal workers since 1972 have assisted workers across many decades of downsizing and plant closures, while concerted efforts at economic diversification and a wholesale re-invention of the region's economic identity have provided new opportunities for displaced coal workers.

<sup>25</sup> Gert-Jan Hospers. "Restructuring Europe's rustbelt: The case of the German Ruhrgebiet." https://www. econstor.eu/bitstream/10419/41768/ 1/38895079X.pdf

<sup>26</sup> Bela Galgoczi. "The long and winding road from black to gree: Decades of structural change in the Ruhr region." http://www.ilo.org/ wcmsp5/groups/public/--ed\_ dialogue/--actrav/documents/ publication/wcms\_375232.pdf

<sup>27</sup> Ibid.

<sup>28</sup> Ibid.

#### US Military program and base closures

The US Department of Defence (DoD), which is the largest employer in the world, frequently makes decisions—such as program changes, cuts or base closures—that have impacts on workers, families and communities, affecting the economic stability of towns and even whole states. DoD's Office of Economic Adjustment<sup>29</sup> operates a number of technical support and grant programs, including:<sup>30</sup>

- Community support and regional job creation
  - Economic diversification
  - Business development, attraction and expansion
  - Workforce development
  - Planning and economic adjustment assistance
  - Environmental cleanup
  - Community development block grants
  - Community service grants
- Support for individuals affected, including
  - Advance notification of a reduction in workforce
  - Pre-separation counseling
  - A hiring preference system with federal agencies to reemploy qualified displaced DOD employees
  - Financial incentives to encourage early retirement of those eligible.
  - Individual employment plans
  - Job training programs
- Working with the President's Economic Adjustment Committee to coordinate the assistance and resources of 22 key federal agencies for communities adversely affected by base closures.
- Assistance in creating a Local Redevelopment Authority

These programs represent a useful model for providing technical and financial assistance to both individuals and communities impacted by state decision-making. Aggregating resources and expertise within an agency tasked with providing transitional assistance ensures effective plans that benefit from established best practices.

<sup>29</sup> US Department of Defence, Office of Economic Adjustment www.oea.gov.

<sup>30</sup> J. Brecher, "Jobs Beyond Coal: A Manual for Communities, Workers, and Environmentalists" 2012. Labor Network for Sustainability. http:// report.labor4sustainability.org/.

> GETTING IT RIGHT: A JUST TRANSITION STRATEGY FOR ALBERTA'S COAL WORKERS

# LESSONS LEARNED (

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The above transition case studies, and other experiences with transitions in Canada and elsewhere, provide guidance for Alberta's coal transition. Core observations are presented below, with suggested roles for government, employers, workers and labour organizations.<sup>31</sup> While these are important principles to consider, just transition strategies must be highly targeted and specific to be effective. A made-in-Alberta approach for just transition informed by best practices elsewhere is needed for Alberta's coal workers.

#### 1. Provide good jobs

Workers want to work, and good transition programs need to provide good jobs that displaced workers can go to. Transitioning a power engineer with an \$80,000 a year salary to a position that pays \$34,000 is not a just transition, as that worker's livelihood and family will face significant upheaval. We should aspire to help workers find good jobs that are of comparable value to their old positions.

Ideally these will be jobs in the same plant. For example, if a coal-fired generation unit is switching to gas, the employer should provide employment guarantees to a substantial proportion of its workers (e.g. 30 per cent – 40 per cent), based on seniority (see Blount St. example, above), and a right of first refusal on any other available jobs to displaced plant workers.

Where there are more workers than jobs in the new plant, then the employer should preferentially provide jobs elsewhere in their company to the displaced workers, and a moving allowance should be provided where needed.

If the number of jobs in the affected plants and elsewhere in the employer's company are inadequate, then workers will need other jobs, ideally in the same sector or related sectors (upstream and downstream in the sector's supply chains). The Government of Alberta should lead a process with employers to create a job pool and transfer program, which includes providing displaced workers with preferential hiring in the same and related sectors, supported by publicly-funded training and upskilling as needed.

Beyond the above, government and industry should be provide workers a pathway to working in growing or "sunrise" industries. Clean energy generation is one of the fastest-growing sectors; with wind capacity increasing 20 times and solar capacity 125 times in the past decade.<sup>32</sup> The Alberta government is working toward doubling renewable energy output through contracts for renewable generation, expecting to leverage \$10.5 billion of private investment, creating 7,200 jobs.<sup>33</sup> This commitment could be increased to provide even greater levels of employment (see Figure 4), helping to employ many displaced coal workers. Given the growing role that renewables will have in Alberta's electrical system, and their resultant need for skilled workers, employers in the renewable electricity industry should be encouraged to participate in job placement strategies for displaced coal workers.

<sup>31</sup> Note that a later section proposes an Alberta Economic Adjustment Agency, which could take over some of the roles, particularly government roles, and coordinate with others.

<sup>32</sup> Government of Canada, "News Release: The Government of Canada accelerates investments in clean electricity" (Nov 21, 2016) http://news.gc.ca/web/article-en. do?mthd=advSrch&crtr.page=1&crtr. dpt1D=6672&nid=1157989.

<sup>33</sup> C. Tait, "Alberta proposes subsidies to double renewable-energy output". Nov 3, 2016. www.theglobeandmail. com/news/alberta/alberta-proposessubsidies-to-double-renewable-energyoutput/article32672866/.

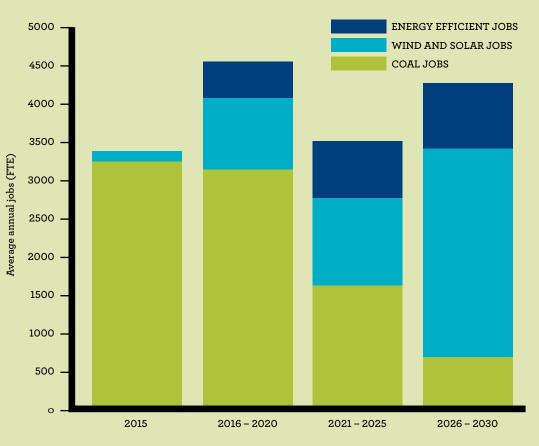


Figure 4—Average annual jobs with coal phase-out, addition of 5,000 MW of renewable energy by 2030, and investment in energy efficiency<sup>34</sup>

<sup>34</sup> B. Jeyakumar "Job Growth in Clean Energy Employment in Alberta's emerging renewables and energy efficiency sectors" (Nov, 2016) www. pembina.org/reports/job-growth-inclean-energy.pdf.

<sup>35</sup> Letter to Premier Rachel Notley from Terry Boston, Coal Phase-Out Facilitator. Sept 30, 2016. www.alberta. ca/documents/Electricity-Terry-Boston-Letter-to-Premier.pdf.

Figure 4—As coal-fired plants are retired, increases of renewable capacity are forecasted to increase employment in the renewable energy sector

Going beyond renewables to include gas, it has been estimated by coal facilitator Terry Boston that Alberta's transition away from coal-fired generation to gas and renewables will involve \$20 billion to \$30 billion of investment.<sup>35</sup> This scale of investment, using normal multipliers, would create on the order of 200,000 to 300,000 person-years of employment, or 10,000 to 30,000 FTEs jobs spread over a ten- to 20-year period. This investment could absorb a number of displaced coal workers. However, it is not enough to expect that investment to create jobs for displaced workers. We need to consider the unique needs of these workers and how we can best connect them directly to these new jobs, through programs such as job retraining or relocation assistance.

In addition, the federal government has announced that it will invest \$21.9 billion over 11 years for green infrastructure to help attract capital investments to transition Canada's electricity system towards 90 per cent non-emitting by 2030. The Government of Alberta should work with the Federal government to attract its proportionate share of those dollars—slightly more than \$2 billion. This could be invested in grid updates, smart grid, intertie upgrades and storage in order to enable more renewable generation. That \$2 billion could attract capital investments on the order of \$10 billion to \$20 billion, or on the order of another 9,000 to 18,000 jobs over that 11-year period. Again, this investment could absorb a number of displaced coal workers.

"The Government of Canada will support this transition by using the Canada Infrastructure Bank to finance projects such as commercially viable clean energy and modern electricity systems between provinces and territories. Canada will attract global investments that grow the economy and create good middle-class jobs by providing investor certainty and a clear signal to the market that Canada is a leader in clean energy... The Government of Canada will work with provinces and labour organizations to ensure workers affected by the accelerated phase out of traditional coal power are involved in a successful transition to the low-carbon economy of the future."<sup>36</sup>

#### 2. Education, training and career counseling

Education, training and career counselling are essential for workers to be able to take advantage of good job opportunities.

Employers should provide targeted, specific training and apprenticeships for jobs that displaced workers are interested in pursuing. In turn, the Government of Alberta should provide more general education and career counselling that will help some workers prepare for larger career-path changes. This process should not wait for plants to close, but rather begin as soon as possible. This way, when the plants do close and jobs are lost, these workers will be prepared to move to another potential job and minimize the impact of plant closures on individual families. Training workers while they are still employed is a prudent decision for the government as well, as they will not need to share the burden of providing for the worker's economic security while they prepare themselves for the transition.

Tuition should be free for displaced workers, consistent with the principle that the burden should be shared fairly, instead of falling on workers. Workers will also need financial support and health benefits while undertaking education, training and career counselling.

The training needs to be informed by a labour market study, in order to ensure that there are real jobs waiting to be filled, and capable of being filled by those taking the training course. Further this training needs to be targeted around building real transferable skills that will help workers not only participate in the workforce, but thrive.

#### Training needs to be relevant

After the collapse of the fisheries in Atlantic Canada, retraining programs were adopted that were insensitive to the needs of impacted workers, leading to low completion rates. The programs also did not adequately take into account local economic conditions, sometimes training workers for nonexistent jobs.

While the programs did succeed in providing some desperately needed financial security, they failed to prepare them for new work opportunities and were hopelessly out of touch with the needs of the workforce. The resulting failure led many to leave Atlantic Canada or remain underemployed in the weakened fisheries industry.<sup>37</sup>

<sup>36</sup> Government of Canada, "News Release: The Government of Canada accelerates investments in clean electricity" (Nov 21, 2016) http://news.gc.ca/web/article-en. do?mthd=advSrch&crtr.page=1&crtr. dpt1D=6672&nid=1157989.

<sup>37</sup> Heritage: Newfoundland & Labrador, "Economic Impacts of the Cod Moratorium", http://www.heritage. nf.ca/articles/economy/moratoriumimpacts.php

#### 3. Financial support for transitions to work and to retirement

Some workers may require interim support for a period prior to being able to land a job. For these workers, transitional allowances are required to ensure they do not suffer a substantive drop in their families' quality of life. And for workers who are late in their careers, and for whom training into a new position is not feasible, assistance in moving into retirement can be an effective transition strategy. Often called pension-bridging or early retirement, the idea is to provide up to a few years of financial support and health and other benefits until the worker's pension benefits would become effective.

The Government of Alberta should work with employers and unions over the next year to:

- develop a database of years-to-retirement for workers who are currently employed in the affected plants
- set aside in a pension bridging trust fund adequate reserves to assist those workers who likely will be within a few years of retirement in 2030.
- conduct an audit of existing pensions and their coverage and gaps, and prepare a plan to ensure pensions are fully funded and that they meet their obligations (see separate report on pensions, attached<sup>38</sup>).

Some of the workers for whom bridging funds are set aside may not require them, e.g. if they have taken positions elsewhere, or taken an earlier retirement.

<sup>38</sup> S. Archer, "Pension And Benefit
Plans In A Just Transitions Strategy
For The Alberta Coal-Fired Electricity
Industry" Nov. 2016, unpublished
report prepared for Alberta Federation
of Labour.

#### 4. Support for communities

During major plant closures, the impact is often felt by entire communities, as jobs disappear, spending declines, and local business and local government revenues dip. Successful transition planning involves support and participation of these communities.

The Government of Alberta should work with affected communities to:

- identify timing for potential workforce reductions
- · conduct studies on local economic activity and local sectors with growth opportunities
- begin to make strategic investments by targeting some of its known investment plans (e.g. renewable energy and energy efficiency) to affected communities.

## 5. A tailored plan, involving labour organizations, workers and communities

As noted by the US Office of Economic Adjustment, every transition is different, and developing a tailored plan with the relevant parties is essential.

Every community ... will have individual factors and unique circumstances. To be successful in managing ... transition and recovery, communities proactively organize to minimize economic distress and challenges. Regardless of the situation, OEA's dedicated project managers and economic adjustment assistance support the proven Organize, Plan, Implement approach that has helped many communities.<sup>39</sup>

The Government of Alberta should lead planning and implementation, involving labour organizations, workers and communities in the process, and providing funding to facilitate their participation where needed. Together, these actors can build a plan that will work for their communities.

#### Growth opportunities, worker capacity, and infrastructure thinking broadly

When considering sectors with growth opportunities, it is important to recognize the diverse capacities that workers possess, and that can translate to entirely new occupational areas.

Laid off East Kentucky coal miners were hired by tech start-up Bit Source to write computer code. The coal miners were identified as having potential for the training and the jobs because they had a good deal of exposure to technology in their work as miners. Extensive training over the course of 22 weeks was provided by the company. Of the ten miners hired as coders, nine remain – a very high success rate.

The infrastructure necessary to support work in this area is broadband, rather than highways and rail. A state-funded project is bringing broadband to the area.<sup>40</sup>

#### 6. Employers and Governments both need to contribute

To protect workers, families and communities, both governments and employers will need to participate. Some elements of a just transition can only be done by employers (e.g. preferential hiring conducted by TransAlta in Centralia) and some can only be done by governments (e.g. expanding EI support, and ensuring employer compliance with just transition plans).

The provincial government needs to:

- bring the relevant employers and the Federal Government to the table and involve them in planning and implementation
- obtain their commitments to contribute appropriately to the transition
- monitor and ensure ongoing contributions are kept up.

<sup>39</sup> Office of Economic Adjustment, "BRAC Technical Assistance" www.oea. gov/how-we-do-it/base-realignmentand-closure/brac-technical-assistance.

<sup>40</sup> Erica Peterson, "From Coal To Code: A New Path For Laid-Off Miners In Kentucky" May 6, 2016. NPR. www. npr.org/sections/alltechconsidered/ 2016/05/06/477033781/from-coal-tocode-a-new-path-for-laid-off-minersin-kentucky



#### 7. Get started now

Alberta's coal transition has the important advantage of an unusually long lead time; the 2030 closure of plants allows for well over a decade of transition program operation. The six-year planning horizon in the Blount Plant conversion was noted as generous. If used wisely, Alberta's even more generous lead time will provide for a low-cost transition that keeps workers working.

Thus it is important to get started, creating jobs, providing workers with training and education opportunities that will enable them to move to new careers, and providing communities with support and time to diversify their economies. The transition program should start immediately, gathering data and policy options, working with unions and communities to plan and implement the transition. The more haphazard phase out of coal-fired electricity in Ontario is a good example of the importance of clear timelines with abundant time to plan for shutdowns. The future of plants such as the Nanticoke power plant (once one of the largest coal plants in the world and now decommissioned) was ambiguous while the politics of electricity generation were debated and coal-fired units were ultimately taken offline with little notice. The impact of this closure left the local community, workers and companies with little time to plan for the future.

"Early planning with a long-term focus and cooperative approach between government, industry and unions helped ensure workers and communities were effectively supported."

- Discussion of Ruhr transition: Australian Council of Trade Unions<sup>41</sup>

"Action is needed now to begin the transition of workers and communities into lower carbon employment opportunities. Waiting for the next jobs crisis is not sound economic policy."

- Mark Rowlinson, Assistant to the National Director of the United Steelworkers and Blue Green Canada's President.<sup>42</sup>

<sup>41</sup> Australian Council of Trade Unions, "Sharing the challenges and opportunities of a clean e nergy economy: Policy discussion paper A Just Transition for coal-fired electricity sector workers and communities."

<sup>42</sup> BlueGreen Canada, "Climate Plans Must Include Just Transition For Environment And Economy To Thrive" http://bluegreencanada.ca/node/229.

# WHERE WE GO FROMHERE

#### Alberta recently reached an agreement with the corporations whose power plants will be affected by the 2030 deadline to eliminate coal plant pollution. The agreement will require \$97 million payments yearly until 2030, for a total of \$1.36 billion.

With that much money flowing to corporations that arguably did not need to be compensated at all,<sup>43</sup> workers and their families and communities should expect their transition program to be fully funded. Making the extremely conservative assumptions that all of them required training, relocation allowance, and a full three years of income support, the total cost would still be in the millions, not the billions, of dollars. A sum that is still less than what the power corporations will receive. Moreover, these costs will only come into effect when the plants actually close and the mines shut down, which is staggered out over the course of 13 years.

The bottom line is that it is very affordable to provide a full and generous transition program for affected workers, and the provincial government should not hesitate to make a commitment for funding job training, relocation allowances, and EI top-up and extension for at least three years of income support for every worker who may need it.

#### Fairness for all workers, leadership from government

In addition to the workers at the three plants that are being phased out by the 2030 pollution standard (Keephills, Genesse & Sheerness), there are the workers currently employed at the other three coal-fired plants (Battle River, HR Milner & Sundance). The latter plants are also being phased out due to changes in government policy (federal policy enacted in 2012) but with mandated closing dates before 2030. Alberta's transition strategy should recognize that all these workers are being affected by policies designed to address carbon emissions, which makes them all equally eligible for transitional assistance.

The core principle of a just transition is that the costs of societal improvements (such as pollution reduction) should be shared fairly rather than resting on workers. It does not matter which government enacted which policy, the truth of the matter is that all coal-fired electricity is being eliminated through government decisions. Both the provincial and federal government needs to show leadership by addressing all job losses associated with the phase out of coal-fired electricity. This is a matter of basic fairness. Further, it is a matter of political importance. As discussed earlier in this paper, the success of policies designed to address climate change will hinge upon those policies success in finding positive outcomes for those negatively impacted. Differentiating each worker's eligibility for inclusion in the transition plan according to which policy impacted their workplace will at best be seen as splitting hairs. At worst, it will be interpreted as leaving some workers without the assistance they require on a relatively arbitrary basis. In either case, we cannot expect the public, let alone workers, to support this policy and provide the social license needed to address climate change.

<sup>43</sup> T. Mar-Laing and B/ Thibault, "Early coal phase-out does not require compensation". Nov 2015. www.pembina.org/pub/early-coalphase-out-does-not-requirecompensation.

#### Overseeing the transition

The Alberta coal transition needs to be managed by an agency that is free of political interference. We propose that the Government establish an Alberta Economic Adjustment Agency (AEAA) that would:

- Develop a just transition plan that places the interests of affected workers, their families and communities as its highest priority
- · Provide information to the public relating to industry changes and coal phase out timing
- Coordinate among corporations and other government entities involved, including those responsible for EI, social services, and economic development
- Assess workforce capacity, future industry needs, infrastructure, community economic development potential, and potential impacts of the transition
- · Forecast electricity generation replacement (gas, renewables, etc.) schedules and workforce needs
- Plan, design and manage several programs:
  - Job Readiness Program—training, education, career counselling, job search
  - Job Movement Program—job pools, preferential hiring, placement and relocation allowances, housing value-loss compensation
  - Interim Support Program—EI top-up and extension, pension bridging for early retirement (for workers hired in 2015 or earlier)
  - Fair Departure Program—ensuring employers provide severance, health insurance and pensions
  - Community Economic Development Program—helping coal communities to transition and diversify their economies
  - Community Facilities and Services Program—funding for communities to maintain facilities and services in the short term
- Monitor and enforce employer commitments, and provide backstop guarantees in cases of non-compliance.

The AEAA would manage an Alberta Economic Adjustment Trust Fund (AEATF), which would finance the programs. The AEATF would be an arms-length fund, with an independent board of trustees, and be secured against political or industry interference. The trust fund could be built up over the period leading up to 2030, with contributions on the order of \$10 million to \$20 million per year.





Alberta's coal-fired electricity generation is winding down over the coming years and decades, continuing an existing trend, driven by a combination of market forces, public policy and technological change. The Government of Alberta and the Federal Government are putting in place pollution limits and other measures that will accelerate the phase out of coal-fired electricity generation, affecting upwards of 3,000 jobs.

A major transition is coming for those workers. The core of a just transition is that the cost of changes made for broader societal good need to be shared across society, and not fall unduly on workers in affected sectors. For the Government of Alberta, this means that the leadership they displayed to the world through the Climate Leadership Plan must be matched by a similar degree of leadership in providing a just transition for coal workers. Fortunately, a long lead-time is available, along with ample funding from Alberta's carbon levy. These advantages, in addition to lessons and policies illustrated by examples of just transition programs from elsewhere allows the Government to ensure that Alberta's coal-plant and coalmine workers can be treated with dignity and respect as the sector winds down. This is an opportunity for the Government of Alberta to be a pioneer in just transition and provide a model to the rest of the world that we can take action on environmental issues and meet the needs of workers. It all relies on getting this transition right.

The AFL and Coal Transition Coalition would like to acknowledge David Thompson and Marvin Shaffer for their invaluable contributions to this document.















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